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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,761	03/07/2005	Antti Tolli	088245-0120	5829

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EXAMINER	
HUYNH, NAM TRUNG	
ART UNIT	**PAPER NUMBER**
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,761	TOLLI ET AL.	
	Examiner	Art Unit	
	NAM HUYNH	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,35-38,46,47 and 58-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17,35-38,46,47 and 58-66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 11/4/09. Of the previously presented claims 1-17 and 35-38, 46, 47, and 58-66; claims 1, 16, 17, 58, 61, and 64 have been amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-17, 36-38, 46, 58, 61, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halonen et al. (US 7,542,779) in view of Arimitsu (US 2001/0009853), and further in view of Willars (US 6,597,679).

Regarding claim 1, Halonen teaches a method comprising:

providing a list (new list) of a plurality of radio access means (candidates) in a communications system to a network element (distributed handover control entity (RNC, BSC, LLRCC)) of the communications system, said list based on a plurality of parameters associated with each of the plurality of radio access means for serving a mobile station (list is based on measurements taken by mobile station), and further wherein the plurality of radio access means use different communication systems (handover candidates may belong to other communication systems such as GSM, UTRAN, or IP RAN);

creating a prioritized ordering of the radio access means based on said list information (CRRM prioritizes candidates and returns new list to distributed handover control entity);

selecting a target radio access means of the plurality of radio access means based on the created prioritized ordering (CRRM may select a target based on its own algorithms and information) (column 9, lines 10-53; figure 1).

However, Halonen does not explicitly teach that the candidates are radio access means that contain a plurality of cells. Arimitsu discloses a method for a mobile terminal to select a network system (abstract). Arimitsu teaches assigning priorities to network systems (radio access means comprising a plurality of cells) based on measured signal strength (paragraphs 44-46). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Halonen to allow the CRRM to prioritize network system candidates, as taught by

Arimitsu, in order to switch from an existing network to a candidate network when the existing network can not sufficiently serve the mobile terminal.

The combination of Halonen and Arimitsu does not explicitly teach sending a request to the mobile station to perform compressed mode measurements at the mobile station based on the selected target radio access means, said measurements for selecting a cell associated with the selected target radio access means. Willars discloses control of compressed mode transmission in WCDMA (title). Willars teaches that when a mobile station is within a hierarchical system and approaches a base station of a WCDMA/CDMA base station, it receives an order to perform compressed mode measurements (column 8, lines 14-62). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Halonen and Arimitsu to allow the target distributed handover entity to order the mobile station to make compressed mode measurements on associated cells, as taught by Willars, when the CRRM determines that handover to a WCDMA/CDMA network is proper. Compressed mode measurements are known to be used in CDMA networks to allow the mobile station to measure on one channel while continusiouly receiving on another.

Regarding claim 2, Halonen teaches the selection is for handover of the mobile station from a first radio access means to a second radio access means (column 7, lines 1-55).

Regarding claim 3, Halonen teaches the first radio access means operates at a first frequency of a radio access technology and the second radio access means operates at a second frequency of said radio access technology (column 7, lines 1-55).

Regarding claims 4 and 7, Halonen teaches the radio access technology is code division multiple access (column 7, lines 1-55).

Regarding claims 5 and 8, Halonen teaches the radio access technology is wideband code division multiple access (column 7, lines 1-55).

Regarding claim 6, Willars teaches the first radio access means operates in accordance with a first radio access technology, and the second radio access means operates in accordance with a second, different, radio access technology (column 7, lines 1-55).

Regarding claim 9, Willars teaches the second radio access means comprises a second plurality of cells (WCDMA network), and the compressed mode measurements comprise signal strength measurements of at least one of said second plurality of cells (column 6, lines 56-67).

Regarding claim 10, Willars teaches the second radio access means comprises a second plurality of cells, and the compressed mode measurements comprise signal strength measurements of at least one of said second plurality of cells (column 6, lines 56-67), and wherein the compressed mode measurements comprise decoding a parameter associated with at least one of the second plurality of cells (column 8, lines 56-67; column 9, lines 1–2; mobile station knows the identity of base station its taking measurements on).

Regarding claim 11, Willars teaches the parameter is the base station identification code associated with one of the plurality of cells (column 8, lines 56-67; column 9, lines 1–2; mobile station knows the identity of base station it's taking measurements on).

Regarding claim 12, Willars teaches the plurality of parameters further comprises at least one of the following: a real time load, a non real time load, or a signal to interference ratio (column 2, lines 25-35).

Regarding claim 13, Halonen teaches the list (candidate new list) comprises a weighting value (priority) (column 9, lines 10-53).

Regarding claim 14, Halonen teaches the plurality of parameters comprise the service priority weight is associated with a suitability of the radio access means in providing a service requested by the mobile station (column 9, lines 22-31).

Regarding claim 15, Halonen teaches the network element is a radio network controller (column 9, lines 10-53).

Regarding claim 16, Halonen teaches the list is provided by a common resource radio management (column 9, lines 10-53).

Regarding claim 17, Halonen teaches the common resource radio management component is a common radio management server (column 9, lines 10-53).

Regarding claim 36, the combination of Halonen, Arimitsu, and Willars teaches selected target radio access means (Halonen; column 9, lines 10-53) comprises a second plurality of cells (Arimitsu; paragraphs 44-46), and Willars teaches the compressed mode measurements comprise signal strength measurements of at least

one cell of the second plurality of cells (column 6, lines 56-67), the method further comprising selecting a handover cell of the second plurality of cells based on a highest signal strength measurement (column 2, lines 25-46).

Regarding claim 37, Halonen teaches ordering the radio access means is further based on a type of service requested (quality of service parameter required by UE) by the mobile station (column 9, lines 10-53).

Regarding claim 38, Halonen teaches the plurality of parameters comprise a service priority weight (classmark information) that is associated with each of the radio access means and that comprises a suitability of a selected radio access means in providing a service requested by the mobile station (column 9, lines 10-53).

Regarding claim 46, Willars teaches triggering a handover of the mobile station to the cell selected based on the compressed mode measurements at the mobile station (column 8, lines 14-32).

Regarding claims 58, 61, and 64, the limitations are rejected as applied to claim 1.

4. Claims 35, 47, 59, 60, 62, 63, 65, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halonen et al. (US 7,542,779) in view of Arimitsu (US 2001/0009853), and further in view of Willars (US 6,597,679) as applied to claims 1, 58, 61, and 64 above, and further in view of Lemson (US 5,655,217).

Regarding claim 35, In the combination of Halonen, Arimitsu, and Willars teaches the limitations set forth in claims 1, 58, 61, and 64, and Willars teaches that a mobile

station sends a compressed mode request to the network base on a measurement order (column 8, lines 14-32), but does not explicitly teach:

determining if performing the compressed mode measurements at the mobile station is successful;

if performing the compressed mode measurements is unsuccessful, selecting a second target radio access means of the plurality of radio access means based on the ordering; and

performing second compressed mode measurements at the mobile station based on the second selected target radio access means, said second measurements for selecting a second cell associated with the selected second target radio access means.

Lemson teaches handover procedure comprising determining if measurement data comprises an excessively high signal level and/or noise bursts. In this condition, the measurements are repeated (figure 5 and column 17, lines 29-59). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Halonen, Arimitsu, and Willars to include verification of measurements, as taught by Lemson, in order to reduce the potential for spurious responses and increase measurement accuracy.

Regarding claims 47, it is further obvious that when the mobile station detects a spurious measurement, as taught by Lemson, it can send another request for another cell to measure since the network has to prepare the transmission slot for compressed mode measurements.

Regarding claims 59, 62, and 65, the limitations are rejected as applied to claim 35.

Regarding claims 60, 63, and 66, the limitations are rejected as applied to claim 47.

Response to Arguments

5. Applicant's arguments with respect to claims 1-17, 35-38, 46, 47, and 58-66 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nam Huynh/
Examiner, Art Unit 2617

/George Eng/
Supervisory Patent Examiner, Art Unit 2617